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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,497	04/11/2006	Seok Joon Moon	09717.0060USWO	7085
23552 7590 05/02/2008 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER				
CHOWDHURY, AFROZA Y				
ART UNIT		PAPER NUMBER		
2629				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/538,497

**Applicant(s)**

MOON ET AL.

**Examiner**

AFROZA Y. CHOWDHURY

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 1/29/2008

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on January 29, 2008 has been entered. Claims 1 and 3-8 are currently pending. Applicant's amended claims and arguments addressed herein below.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicant Admitted Prior Art** (herein after AAPA) in view of **Kang** (US Pub. 2003/0058194)

As to claim 1, AAPA teaches a plasma display panel for a multi-screen, comprising: a plurality of unit plasma display panels wherein a front panel whereon one or more sustain electrodes and one or more scan electrodes are formed is sealed with a rear panel whereon an address electrode is formed (fig. 1, paragraphs 1<sup>st</sup> – 7<sup>th</sup>, in background art).

AAPA does not teach explicitly teach a plasma display panel wherein end portions of the sustain electrodes form a common electrode, the end portions of the sustain electrodes are located opposite to an edge of the scan electrodes, the scan electrodes receive the scan signals through the edge of the scan electrodes, and the sustain electrode is configured to receive the sustain signal from the common electrode.

Kang teaches a plasma display panel wherein end portions of the sustain electrodes (fig. 7(Z)) form a common electrode (fig. 7(92), [0069]),

the end portions of the sustain electrodes (fig. 7(Z)) are located opposite to an edge of the scan electrodes (fig. 7(Y)),

the scan electrodes (fig. 7(Y)) receive the scan signals through the edge of the scan electrodes (fig. 7(91)), and

the sustain electrode (fig. 7(Z)) is configured to receive the sustain signal from the common electrode (fig. 7(92)).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the plasma display panel of Kang into the multi screen PDP of AAPA to make a wide screen plasma display device in order to reduce manufacturing cost.

As to claim 3, AAPA (as modified by Kang) teaches a plasma display device where the sustain electrodes are connected to a common electrode (fig. 13(300), col. 12, lines 10-23, in Song et al.).

AAPA (as modified by Kang) does not teach a PDP where the common electrode is formed on a sidewall of the front panel.

However, it is an obvious design choice of making a PDP where the common electrode is formed on a sidewall of the front panel located in a place adjacent to different plasma display panels.

4. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicant Admitted Prior Art** (herein after AAPA) in view of **Kim et al.** (US Pub. 003/0160569).

As to claim 4, AAPA teaches a plasma display panel for a multi-screen, comprising: a plurality of unit plasma display panels wherein a front panel whereon a sustain electrode and a scan electrode are formed is sealed with a rear panel whereon an address electrode is formed (fig. 1, paragraphs 1<sup>st</sup> – 7<sup>th</sup>, in background art).

AAPA does not teach both ends of the sustain electrodes are connected in common to a first common electrode and a second common electrode, and a sustain signal is simultaneously applied to both ends of the sustain electrodes from the first common electrode and the second common electrode in a plasma display panel.

Kim et al. discloses a plasma display apparatus wherein both ends of the sustain electrodes are connected in common to a first common electrode (fig. 3(100)) and a second common electrode (fig. 3(100')), and wherein a sustain signal is simultaneously

applied to both ends of the sustain electrodes from the first common electrode and the second common electrode ([0026]).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the plasma display apparatus of Kim et al. into the multi-screen PDP of AAPA to make a wide screen plasma display device in order to minimize waveform distortion and reduce power consumption.

As to claim 5, AAPA (as modified by Kim et al.) teaches a plasma display apparatus wherein both ends of the sustain electrodes are connected in common to a first common electrode and a second common electrode (fig. 3, in Kim et al.).

AAPA (as modified by Kim et al.) does not teach a third common electrode connected to one of the first common electrode and the second electrode.

However, it is an obvious design choice to make a plasma display panel comprising a third common electrode connected to one of the first common electrode and the second electrode in an opposite position where a scan signal is applied to the scan electrode, and extended to the position whereto the scan signal is applied in order to further improve display quality.

As to claim 6, AAPA (as modified by Kim et al.) teaches a plasma display apparatus wherein both ends of the sustain electrodes are connected in common to a first common electrode and a second common electrode (fig. 3, in Kim et al.).

AAPA (as modified by Kim et al.) does not teach a third common electrode connected to the first common electrode and the second electrode to each other.

However, it is an obvious design choice to make a plasma display panel with a third common electrode for connecting the first common electrode and the second electrode to each other to minimize waveform distortion.

As to claims 7 and 8, AAPA (as modified by Kim et al.) teaches a plasma display apparatus wherein both ends of the sustain electrodes are connected in common to a first common electrode and a second common electrode (fig. 3, in Kim et al.).

AAPA (as modified by Kim et al.) does not teach a third common electrode that is formed to have a broader width than that of the sustain electrode.

However, it is an obvious design choice to make a plasma display panel where a third common electrode is formed to have a broader width than that of the sustain electrode in order to have a low impedance.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 and 3-8 have been considered but are moot in view of the new ground(s) of rejection.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFROZA Y. CHOWDHURY whose telephone number is (571)270-1543. The examiner can normally be reached on 7:30-5:00 EST, 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

4/26/2008

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629